

## Leoš KLIMEŠ & Antonín ROUŠAR: Remarkable harvestmen from the Czech Republic

The fauna of harvestmen of the Czech Republic is relatively well-known (ŠILHAVÝ 1956, MARTENS 1978). Still, species new for the country have recently been found both in natural (KLIMEŠ & BEZDĚČKA 1995) and synanthropic habitats (KLIMEŠ 1995). Our knowledge of the distribution of most species is, however, far from complete. For several species, including ones found relatively frequently, only a few localities have been reported from the Czech Republic up to now. In this paper we present some interesting findings of harvestmen in Bohemia (western Czech Republic) and Moravia (eastern part) which may stimulate further faunistic research in the territory (fig. 1).



Fig. 1: The map of the Czech Republic with towns (full circles), National Nature Reserves (open circles), National Parks and Landscape Protected Areas (dotted; names in italics) from which we report new findings of harvestmen.

Individuals samples of harvestmen were identified either by the first (LK) or the second (AR) author and are deposited in private collections of the respective authors.

### **1. *Opilio canestrinii* (THORELL, 1876)**

A medium-sized long-legged Mediterranean spreading species. Its original distribution was probably limited to the Apennine Peninsula, neighbouring isles, south of the Alps and perhaps also to Tunisia (GRUBER 1984, 1988). In the past 20 years it has spread over Germany (MARTENS 1978, BLISS 1981, 1990), Austria (THALER 1979), Denmark (ENGHOFF 1987, 1988) and southern Sweden (ENGHOFF 1988). So far, the species has not been found in Poland (BLISS 1990).

In August 1994 *O. canestrinii* was found in Třeboň, South Bohemia, about 25 km north of Austrian border (KLIMEŠ 1995). As the species was not found in this town during the previous 11 years (see KLIMEŠ 1987) it has been concluded that *O. canestrinii* has spread to the area recently. The number of specimens recorded on walls in Třeboň remarkably exceeded the numbers of individuals of all other species (*Opilio saxatilis*, *O. parietinus*, *Leiobunum blackwalli*, *L. rotundum* and *Oligolophus tridens*), except for *Phalangium opilio* which was often as abundant as *O. canestrinii*.

*O. canestrinii* was recently found in other towns in Bohemia, too: Praha (1995, 1996), Hradec Králové (1996), České Budějovice (1995, 1996), Trutnov (1996) (all LK), Chomutov (1994), Bezručovo údolí near Chomutov (1996) and Místo near Chomutov (1996) (all AR); and, also in Moravia: Telč (1996), Velké Losiny near Šumperk (1996), Veselí nad Moravou (1996) (all LK). *O. canestrinii* was an abundant species at all localities. In contrast to other long-legged harvestmen it was found to climb into the crowns of trees, up to 5 m in height (see also MALTEN 1991).

### **2. *Egaenus convexus* (C. L. KOCH, 1835)**

This south-eastern European species was recently discovered as a new species for the Czech Republic. It was found in the National Nature Reserve of Čertoryje, Bílé Karpaty mountains, southern Moravia (KLIMEŠ & BEZDĚČKA 1995). Another locality, close to the first one, was found at a tourist camp of Lučina near Radějov (June 12, 1996, 1 female) (LK).

### **3. *Zachaeus crista* (BRULLÉ, 1832)**

Another south-eastern European species which is known from several localities in Slovakia - Lučenec, Prešov, Sabinov, Bratislava, Levice, Štúrovo (ŠILHAVÝ 1956), Sobrance (ŠILHAVÝ 1972) and Rybník near

Bratkova (LÁC in MARTENS 1978). KRATOCHVÍL (1934) reported its record from the only locality in Moravia - at Bzenec (SE Moravia). This finding was not mentioned either by ŠILHAVÝ (1956) or MARTENS (1978) in their monographs. Surprisingly, *Z. crista* was found in the National Natural Reserve of Čertoryje, Bílé Karpaty mountains not far from the village of Bzenec (June 15, 1993, 1 male, LK; BEZDĚČKA (1996)). The species was abundant both in dry grasslands dominated by *Bromus erectus* and under nearby isolated oaks where it occurred together with *Egaenus convexus*. The high abundance of the species was confirmed in 1994, 1995 and 1996 (22 males, 31 females and 46 juv. in total). Recently, a new locality of the species was found in the National Nature Reserve of Jazevčí, Bílé Karpaty mountains (June 9, 1996, 2 juv.) (LK).

#### 4. *Nemastoma triste* (C. L. KOCH, 1835)

A relict species distributed locally in the Alps and in the mountains of central Europe. The first record published from the Czech Republic was from the Šumava mountains (ROEWER 1923). At the moment five localities of *N. triste* are known from this area: Plešné jezero (1986-1987, leg. V. Růžička, 2 males, pitfall traps), the bog of Rokytská slat' (August 29, 1995, leg. V. Růžička, 1 male and 1 female, pitfall traps), Nature Reserve of Skalka na Sádku, near the village of Klenčí, in stony debris (pitfall traps placed from October 27, 1993 to May 11, 1994, leg. V. Růžička, 1 female) and Boubín (pitfall traps placed from 5th to 26th October 1989, leg. V. Růžička, 12 males and 11 females) (all LK). Moreover, three males were captured at the last locality by hand on November 7, 1981 (AR). Four males and two females were captured by hand at Hajna hora near Vimperk, in a pine-spruce forest (October 30, 1982)(AR).

The species has been reported from several more regions of the Czech Republic. One locality is in the Krušné hory Mts., Chomutov, near the village of Loučky, at a peat bog with *Pinus uncinata* (November 1982, 1 male and 3 females, by pitfall traps)(AR). From western Bohemia one locality was reported by ŠILHAVÝ (1956, 1966) (Mariánské Lázně), and ŠMAHA (1984, 1986) found it in the Landscape Protected Area of Křivoklátsko. Recently the species was also found in NE Bohemia - in the district of Broumov, Broumovské stěny rocks, Kovářova Rokle (Vrtule) (from April to October 1995, leg. Jiří Spíšek, 1 male, 2 females and 3 juv., pitfall traps) (LK). Some more localities have been found in the Landscape Protected Area Křivoklátsko, at Týřov (May 28, 1994, leg. V. Růžička, 1 male), and Sv. Jan, Týřov, Obří zámek and Branov (October 1994 to May 29, 1995, leg. V. Růžička, 4 males and 1 female, pitfall traps at the soil surface and in

scree). One locality was found in northern Bohemia, Kamenec near Česká Lípa (June 30, 1993 to July 30, 1995, leg. V. Růžička, 8 males, 22 females and 9 juv., pitfall traps in stony debris) and one locality was in S Bohemia - Třeboň Basin, Majdaléna, National Nature Reserve of Stará řeka, in a lowland deciduous forest at ca. 400 m a.s.l. (April 18, 1994, 2 males and 3 females) (all LK).

One locality of *N. triste* was reported also from the Krkonoše mountains, but only from the Polish side (FICKERT 1875, leg. Brunn, rev. Gruber, ZMH, cited in MARTENS 1978). Two localities were recently found on the Czech side of the mountains - a meadow near Albrechtec (June 13 to July 7, 1989, leg. J. Vaněk, 3 males, 2 females, pitfall traps) and in Navorská jáma (1988-1991, leg. K. Tajovský, 3 males and 1 female, pitfall traps) (all LK).

### **5. *Leiobunum limbatum* L. KOCH, 1861**

The distribution of the species in the Czech Republic was completely unclear until recently. In older literature several localities were cited, such as Radnitz [Radnice] at Plzeň (MARTENS 1978), Šumava Mts. (ŠILHAVÝ 1956) and Netín near Velké Meziříčí (KRATOCHVÍL 1934, ŠILHAVÝ 1956). However, ŠILHAVÝ (1971a) did not mention any locality and only speculated about the possible occurrence of the species in the Šumava Mts.

Recently the species was found in several towns and villages in Bohemia: Praha, Karlovo náměstí square (August 14, 1994, 2 males and 2 females; and September 24, 1996, 2 males, 3 females), Třeboň (October 1995, 1 male), Trutnov (October 4, 1996, 1 male), Hradec Králové (October 3 to 5, 1996, 2 females), Pec pod Sněžkou (October 4, 1996, 10 males, 9 females and 7 juv.) (all LK), Krušné hory, the valley of Bezručovo údolí near Chomutov (October to the beginning of November 1996, 10 males and 5 females) and Místo near Chomutov (1 male, October 28, 1996) (both AR).

Besides these localities, several findings from natural habitats have been recently published by BEZDĚČKA (1996) from SE Moravia.

### **6. *Nelima semproni* SZALAY, 1951**

As a species new for Bohemia and Moravia it was collected by Miller between 1966 and 1970, and published by ŠILHAVÝ (1971b, 1972), at the localities of Rajhrad and Pouzdřany. Another locality in South Moravia was found recently by Bezděčka - the Nature Reserve of Milovická stráž (BEZDĚČKA & ROZKOŠNÝ 1995). The species has been found as new for Bohemia (ROUŠAR 1997) at two localities: Lipenec near Louny (November 1, 1992, 5 males and 3 females, pitfall traps) and at Dubčany near Žatec (October 4, 1996, 3 males, 4 females, by hand) (both AR).

### **7. *Trogulus nepaeformis* agg.**

Only a few localities of this species complex are given in the literature from the Czech Republic. In Moravia it was found near the village of Veveří (ŠILHAVÝ 1970: 107, leg. L. Vysloužil) and at a mountain locality of Strání-Javořina (900 m a. s. l., BEZDĚČKA 1996). Another locality was found in the Landscape Protected Area of Moravský kras, near Skalní Mlýn (May 5, 1993 to May 12, 1994, leg. V. Růžička, 1 male and 1 female, pitfall traps) (LK). Until recently no records have been known from Bohemia - the first and only one was published from the Landscape Protected Area of Křivoklátsko by ŠMAHA (1983 and 1984). Using pitfall traps he collected 111 individuals there. In 1993 (1 male and 1 female) and 1994 (3 males and 3 females) the species was collected at Velká Pleš and Vůznice by V. Růžička. At Sv. Jan, Týřov, Obří zámek and Branov 2 males and 2 females were captured by pitfall traps placed in a scree (leg. V. Růžička, October 1994 to May 22, 1995). A new locality was also found in the Landscape Protected Area of Kokořínsko, Kokořínský důl, in wet *Carex* meadows, *Alnus* and scree forests (1995-1996, leg. L. Beran, 1 male, 1 female and 2 juv., pitfall traps). At Křesín, near Louny, 2 males and 4 females were captured (between September 14 and November 2, 1985, leg. J. Buchar, pitfall traps) (all LK). The last new locality of *T. nepaeformis* in Bohemia is in the Nature Reserve of Úhošť, near Kadaň, where it was captured in a deciduous forest (July 13, 1981, 1 male and 3 females, pitfall traps) (AR).

### **8. *Leiobunum blackwalli* MEADE, 1861**

Another poorly known species. Its distribution in the Czech Republic is limited to the area west of the Morava River according to ŠILHAVÝ (1956). The species was already given in Nosek's paper (NOSEK 1900). BARTOŠ (1941) found it in the neighbourhood of Praha at several localities (Krč, Hostivař, Závist, Úvaly, Klánovice, Kunratice). Since then, no more data have been published from the Czech Republic.

Recently the species has been collected in Třeboň (September 19, 1996, 2 males, 2 females and 4 juv.), Praha (September 24, 1996, 2 males, 2 females and 4 juv.) (both LK) and Chomutov (from the end of July to the beginning of November, 1996, 69 males, 38 females and 19 juv., AR).

### **9. *Astrobus laevipes* (CANESTRINI, 1872)**

In Bohemia, the species has been found only in the neighbourhood of Praha (BARTOŠ 1941). Its distribution along the Labe River in Germany (MARTENS 78, Karte) extends to Bohemia, as indicated by a new locality at Povrly, near Ústí nad Labem (May 16, 1995, leg. V. Růžička, 1 male and 3 females, LK).

Two males were captured at Lipenec, near Louny (October 4, 1996) (AR). Distribution of the species in S Moravia is more continuous as indicated by numerous localities with abundant populations (Pálava: Děvín, National Nature Reserve of Ranšpurk, Nature Reserve of Křivé jezero, Nature Reserve of Slanisko, leg. J. Chytil, 1993-1996 (LK). Some more localities from this area are given by ŠILHAVÝ (1956, 1972), OBRTTEL (1976), KŘÍSTEK (1991) and BEZDĚČKA & ROZKOŠNÝ (1995).

**Acknowledgement:** We thank to Steve RIDGILL for his comments and linguistic help.

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Leoš KLIMEŠ, Institute of Botany, Section of Plant Ecology, Dukelská 145, CZ-379 82 Třeboň, Czech Republic, e-mail: klimes@butbn.cas.cz  
 Antonín ROUŠAR, V přírodě 4230, CZ-430 01 Chomutov, Czech Republic